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# Post-menapousal hirsutism due to ovarian theca-cell hyperplasia and Leydig cell tumour: A case report.

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# Introduction

Hirsutism is defined as the presence of terminal coarse hairs in females in a male-like distribution. It affects around 5-10% of women, increasing with age because of low estrogen and relatively high androgen levels, especially in post-menapousal period.

## Case

A seventy five years old female admitted to endocrinology department with complaining of hair loss and hirsutism within one year. Her past medical history consisted of type 2 diabetes, coronoary artery disease, hypertension and depression. She was obese with body mass index 34 kg/m2, and she had temporal balding, coarseness of fascial features, hypertrichosis of c\hin, back, buttock and genital region. She had also virilization with the increase in muscle mass, mild clitoromegaly, hoarseness of voice, and she complanied about depressed mood.

Patient serum gonadotropin concentrations were in the post-menopausal ranges but serum testosteron level was as high as 435 ng/dL (10-75). Free testosteron level was also high as 3.6 pg/mL (0.2-3), and serum DHEA-S level was normal as 33 mcg/dL (25-460). For excluding any ovarian pathtology, abdomino-pelvic MRI was done. It revealed atrophic ovaries and a 2.5 cm mass at right adrenal gland compatible with an adenoma. Adrenal adenoma was hormonally inactive. To distinguish whether adrenal adenoma produces any testosteron or its' metabolite, the patient was underwent adrenal venous sampling (AVP). AVP was not diagnostic because of inability to cannulatte right adrenal vein. On this occasion, oopherectomy and unilateral adrenalectomy was planned. Pathology report was as follows: "Non-specific adneal adenoma, theca-cell hyperplasia in right ovary and Leydig cell tumour in left ovary". After surgery patient's testosteron level declined immediately, and after six months, she was free of her complaints.

## Discussion

There is a dramatic decrease in adrenal androgens with aging, and changes in ovarian androgen secretion after menopause are far less dramatic. Even if patient had radiologically normal ovaries thecacell hyperplasia and ovarian tumours must be kept in mind especially in patients with high testosteron levels, because adrenal androgens are less responsible for severe female hirsutism in elderly.

## Biography

Demet Corapcioglu has completed his PhD at the age of 23 years from Ankara University Faculty of Medicine /Turkey and postdoctoral studies from Ankara University School of Medicine/Turkey. She is the director of Endocrinology and Metabolism Department, Internal Medicine, at Ankara University Faculty of Medicine. She is a member of ETA and ESE. She has published more than 25 papers in reputed journals and has been serving as an editorial board member of repute. (Up to 100 words).